

ROMANIA

MARCU, C., Lecturer; BRATU, Viorica; MANUCHEAN, M., MD; DEBETRESCU, Catalina, Chemist; DOBULESCU, D., MD; MANOLESCU, E., MD; POPA, A., MD.

Bucharest, Farmacia, No 10, Oct 63, pp 617-623

"On the Antituberculous Activity of New Hydrazide Substitutes,
Derived from Certain Aromatic and Cyclo-Aliphatic Acids."

(7)

TURCU, Gr.; TEITEL, P.; BRATU, V.; ZAHARIA, M.; LEONTESCU, A.

Erythrocytic biochemical lesion rendered evident by radioactive phosphorus. Studii cerc biochimie 6 no.1:97-108 '63.

1. Laboratorul de biochimie si izotopi radiactivi, Centrul de hematologie, Bucuresti.

X

BRATU, V.; TEITEL, P.; TURCU, Gr.; JIANU, M.; NICULESCU, Gh.

Radiochromatographic determination of siderophilin on ion exchanges and its importance for diagnosis. Studii cerc biochimie 6 no.2:263-269 '63.

1. Laboratorul de biochimie si izotopi radioactivi, Centrul de hematologie, Bucuresti.

X

NICOLAU, C.T.; BRATU, V.; TEITEL, P.

Utilization of radioactive iron in the study on siderophilin genetic types. Studii cerc biochimie 7 nr.2:161-164 '67.

1. Laboratory of Biochemistry and Radioactive Isotopes, Center of Hematology, Bucharest. 2. Corresponding Member of the Rumanian Academy (for Nicolau). Submitted November 20, 1963.

NICOLAU, C.T., prof.; TEITEL, P. dr.; TURCU, G.dr.; BRATU, V.dr.

Compensated chronic hemolytic disease with changes in erythrocytic energetic metabolism. Med. intern. 16 no.1:27-38 Ja'64

1. Lucrare efectuata la Centrul de hematologie, Bucuresti;
director: prof. C.T.Nicolau, membru corespondent al Academiei
R.P.R.

*

TEITEL, P., dr.; BRATU, V.dr.; BUTOIANU, E. dr.; TAIGAR, S. dr.

Uses of radioactive isotopes in hepatology. Med. intern.
(Bucur.) 10 no.5:523-529 My'64

1. Lucrare efectuata la Centrul de hematologie si Clinica
de hematologie I.M.F. [Institutul medico-farmaceutical],
Bucuresti (director: prof. C.T.Nicolau).

NICOLAU, C.T.; TEITEL, P., dr.; BRATU, V., chim.; XENAKIS, Agripina, dr.;
Butoianu, Elena, dr.

Favorable therapeutic effect of adenosine monophosphate (AMP)
in a case of compensated chronic hemolytic disease due to
insufficiency of erythrocytic energetic metabolism. Med. intern.
(Bucur.) 17 no.4:423-430 Ap '65.

1. lucrare efectuata in centrul de hematologie, Bucuresti
(director: prof. C.T. Nicolau).

COUNTRY : ROMANIA R
CATEGORY : Chemical Technology. Chemical Products and Their
Applications, Safety and Sanitation
ABS. JOUR. : Khim., No 18, 1959, No. 68379
AUTHOR : Valeriu, H.; Bratu, Z.
INSTITUTE : -
TITLE : Fire Preventive Measures in the Manufacture of
Aniline Dyes.
ORIG. PUB. : Kaza contra incendiiilor. 1958, 10, No 12, 4 - 6

ABSTRACT : Described is a process for the manufacture of
azo-dyes, enumerated are intermediate products
and their properties from the standpoint of fire
hazard and methods of the products safe handling.
-- Z. Kharishkiy

Card: 1/1

H - 16

BRATUC', N.V.

Electrical reactions of the various strata of the cerebellar cortex during the excitation of the visceral nerves. *Fiziol. zhur.* 48 no.3: 303-308 Mr '62. (MIRA 15:4)

1. From the Department of Physiology, Medical Institutes of Odessa and Vinnitza.

(CEREBELLUM) (VISCERA--INNERVATION)
(ELECTROENCEPHALOGRAPHY)

BRATUKHCHEV, TS.

Rationalization in construction.

p. 29 (STROITELSTVO) Vol. 4, no. 5, 1957,
Sofia, Bulgaria

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,
March 1958

BRATUKHCHEV, TS.

New method for propping the forms. Pipes of plastic materials. Tunnel under Mont Blanc.

(STROITELSTVO) Vol. 4, no. 7, 1957,
Sofia, Bulgaria

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,
March 1958

BRATUKHOEV, TS.

Assembling a shel roof. p. 29.

STROITELSTVO, Sofia, Bulgaria, Vol. 6, no. 3, 1959.

Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 10, ^{Oct.} 1959
Uncl.

BRATUKHCHEV, Tsanko, inzh.

Building of the cellulose and paper combinate in the vicinity
of the village Dukovtsi, Vratsa district. Stroitelstvo 8 no.6:
5-10 '61.

BRATUKHCHEV, Tsanko, inzh.

Construction of the Balkanbas cableway in the Sliven District.
Stroitelstvo 11 no. 4:12-17 J1-Ag '64.

BRATUKHIN, A., kand.tekhn.nauk

Study of the technological characteristics of hard wheat. Muk.-
elev. prom. '28 no. 6-18-20 Je '62. (MIRA 15-7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produktov
yego pererabotki.
(Wheat)

BRATUKHIN, A., kand.tekhn.nauk

Improving the technological process of gradual reduction of wheat
at penumatic flour mills. Muk.-elev, prom. 28 no.10:10-12 0
'62. (MIRA 16:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i
produktov yego pererabotki.
(Wheat) (Grain milling)

BRATUKHIN, A. M.

Bratukhin, A. M. - "A new high-grade milling method of wheat," In the symposium:
Soobshch. i referaty (Vsesoyuz. nauch.-issled. in-t zerna i produktov ego pererabotki),
Moscow, 1949, p. 42-44

BRATUKHIN, A.^M, kandidat tekhnicheskikh nauk.

Conditioning of grain. Muk.-elev.prom. 20 no.2:15-18 F '54.
(MLRA 7:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i
produktov ego pererabotki.
(Wheat milling)

BRATUKHIN, A.¹¹, kandidat tekhnicheskikh nauk.

Effect of the aleurone layer on the quality of flour. Muk.-elev.
prom. 20 no.6:12-15 Je '54. (MLRA 7:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i pro-
duktov ego pererabotki.
(Wheat)

BRATUKHIN, A., kand.tekhn.nauk

Three-grade 75% wheat milling. Muk.-elev.prom. 24 no.9:25-28
S '58. (MIRA 11:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produktov
yego pererabotki.

(Wheat milling)

BRATUKHIN, A., kand.tekhn.nauk; SENATORSKIY, B., kand.tekhn.nauk;
BORISENKO, I., kand.tekhn.nauk.

Possibilities of using pneumatic transportation in conditioning grain
and milling products. Muk-elev.prom. 25 no.1:23-25 Ja '59.

(MIRA 12:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produktov
yego pererabotki.

(Pneumatic-tube transportation)

(Grain-handling machinery)

BRATUKHIN, A., kand. tekhn. nauk

Milling high-grade flour from soft and durum wheats for the baking industry. Muk.-elev. prom. 25 no.5:19-21 My '59.

(MIRA 12:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produktov yego pererabotki.

(Wheat milling)

BRATUKHIN, A., kand.tekhn.nauk

Milling durum wheat into macaroni flour. Muk.relev.prom. 27
no.5:10-14 My '61. (MIRA 14:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produktov
yego pereabotki.

(Wheat milling)
(Macaroni)

BRATUKHIN, A.M.

Technological characteristics of flour produced from durum
wheat. Khleb.i kond.prom. 6 no.6:1-4 Je '62. (MIRA 15:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna.
(Flour--Analysis and chemistry)

BRATUKHIN, A. M., kand. tekhn. nauk

Durum wheat and its technological properties. Zemledelie 25
25 no.2:11-15 F '63. (MIRA 16:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produktov
yego pererabotki.

(Wheat)

GOLENKOV, V.F.; BRATUKHIN, A.M.; ZHIL'TSOVA, T.Ye.

Chemical composition of high-quality rye grist products.

Prikl. biokhim. i mikrobiol. 1 no.4:369-372. J1-Ag '65.

(MIRA 18:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i
produktov yego pererabotki.

BRATUKHIN, A.S., inzhener

Grounding in presence of dielectric ores. Gor.zhur. no.3:42-44
Mr '55. (MLRA 8:7)
(Electric Currents--Grounding) (Dielectrics)

Bratukhin, I. P.

BRATUKHIN, I. P.

Avtozhiry. Teoriia i raschet. Moskva, Gosmashmetizdat, 1934.
109 p., illus.
Title tr.: Autogiro. Theory and design.

NCF

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of
Congress, 1955.

GESSOW, Alfred; MYERS, Garry C.; BIRYULIN, V.I., inzhener [translator];
~~BRATUKHIN, I.P.~~, professor, redaktor; ZUDAKIN, I.M., tekhnicheskii
redaktor.

[Aerodynamics of the helicopter] Aerodinamika vertoleta. Perevod
s angliiskogo V.I.Biriulina. Pod red. I.P.Bratukhina. Moskva, Gos.
izd-vo oboronnoi promyshlennosti, 1954. 254 p. [Microfilm](MLRA 8:1)
(Helicopters) (Aerodynamics)

BRATUKHIN, I. P.

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PHASE I BOOK EXPLOITATION

Bratukhin, Ivan Pavlovich

Proyektirovaniye i konstruktsii vertoletov (Planning and Design of Helicopters),
Oborongiz, Moscow, 1955, 360 pp., number of copies not given.

Ed.: Scientific Ed.: Kastorskiy, V. E., Dotsent, Candidate of Technical Sciences;
Managing Ed.: Sokolov, A. I., Engineer; Publication Ed.: Bogomolova, M. F.;
Tech. Ed.: Chistyakova, A. V.; Reviewers: Mil', M. L., Doctor of Technical
Sciences, and Grushin, P. D., Professor

PURPOSE: The book is intended for students of aeronautical schools and engineers
engaged in helicopter design and is approved by the Main Administration
of Polytechnic and Mechanical Engineering Vuzes of the Ministry of
Higher Education.

COVERAGE: The book treats questions of helicopter and helicopter component design.
The methods of selection and determination of the basic characteristics
and dimensions of helicopters are given. General concepts regarding
weight distribution and position of the center of gravity in helicopters
are considered and examples for weight distribution in helicopters of

~~Card 1/10~~

Moscow Aviation Inst.

Planning and Design of Helicopters (cont.)

various types are given. In addition, the book contains an analysis of basic designs of helicopters, tables of statistical data on helicopters already built, and a description of the design of various helicopter components (blades, rotor heads, and rotor dampers, swash plates, tail propellers, transmissions, power plants, landing devices, etc.) The design descriptions are prefaced with data regarding the purpose of helicopter components and their specifications. In addition to the authors of the bibliographic references, a number of scientists connected with the early history of helicopters are mentioned, among them the helicopter designer and pilot A. M. Cheremukhin (altitude record of 1932: 605 m). Gratitude (particularly for graphical work) is expressed to Ye. I. Ruzhitskiy and Ye. I. Semenov, engineers, and A. V. Koroleva, technician.

There are 25 Soviet references and 3 American (translated into Russian).

~~Card 2/10~~

RUZHITSKIY, Yevgeniy Ivanovich; MIL', M.L., doktor tekhn.nauk, retsenzent;
~~BRATUKHIN, I.P., prof., red.;~~ TUBYANSKAYA, P.G., izdat.red.;
~~ORESHKINA, V.I., tekhn.red.~~

[Aviation without airports] Bez aerodromov i aviatsiya. Moskva,
Gos. izd-vo obr. promyshl., 1959. 169 p. (MIRA 12:12)
(Helicopters) (Vertically rising airplanes)

YUR'YEV, Boris Nikolayevich, akademik [deceased]; LESNIKOVA, N.P.,
kand. tekhn. nauk; SHAYDAKOVA, V.I., kand. tekhn. nauk;
ARTOBOLEVSKIY, I.I., akademik, otv. red.; BRATUKHIN, I.P.,
prof., zam otv. red.; GORSHKOV, G.B., red. izd-va; LAUT, V.G.,
tekhn. red.

[Selected works] Izbrannye trudy. Moskva, Izd-vo Akad.nauk
SSSR. Vol.1. [Propellers, helicopters] Vozdushnye vinty. Verto-
lety. 1961. 551 p. (MIRA 15:1)
(Propellers) (Helicopters)

YUR'YEV, Boris Nikolayevich, akademik [deceased]; ARTOBOLEVSKIY, I.I.,
akademik, otv. red. toma; BRATUKHIN, I.P., prof., zam .otv.
red.; GORSHKOV, G.R., red. izd-va; LAUT, V.G., tekhn. red.

[Selected works] Izbrannyye trudy. Moskva, Izd-vo Akad. nauk
SSSR. V1.2. [Aerodynamics. History of aviation engineering]
Aerodinamika. Istoriia aviatsionnoi tekhniki. 1961. 272 p.
(MIRA 15:4)

(Aerodynamics) (Aeronautics--History)

BRATUKHIN, M.N., mashinist-instruktor

Some advice on the operation of the TE3 diesel locomotive. Elek.
i tepl.tiaga no.8:33-34 Ag '63. (MIRA 16:9)

1. Depo Krasnoufimsk Gor'kovskoy dorogi.
(Diesel locomotives)

BRATUNIN, Yu.K. (Perm')

Estimation of the critical Reynolds number for liquid flow
between two rotating spherical surfaces. Prikl. mat. i
mekh. 25 no.5:858-866 S-O '61. (MIRA 14:10)
(Reynolds number)

ACCESSION NR: AP4044716

S/0207/64/000/004/0023/0028

AUTHORS: Bratukhin, Yu. K. (Perm'); Shliomis, M. I. (Perm')

TITLE: On perturbations from equilibrium in conducting fluid filling a spherical cavity in the presence of a magnetic field

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 4, 1964, 23-28

TOPIC TAGS: magnetic field, equilibrium condition, perturbation, Hartman number, hydromagnetic wave, hydrodynamic theory

ABSTRACT: The effect of small perturbations on a conducting fluid with viscosity η and electric conductivity σ filling a cavity with immovable walls and in the presence of a magnetic field H was studied analytically. The equations describing the velocity and field perturbations u and h , proportional to $e^{-\lambda t}$, are given by

$$-\lambda u = \nabla^2 u + M (\nabla \nabla) h - \nabla p, \quad \text{div } u = 0,$$

$$-\lambda \nabla h = \nabla^2 h + M (\nabla \nabla) u, \quad \text{div } h = 0$$

$$\left(N = \frac{4\pi\sigma\eta}{c^2}, \quad M = \frac{HR}{c} \left(\frac{\sigma}{\rho\nu} \right)^{1/2} \right)$$

Card 1/2

ACCESSION NR: APL044716

where M - Hartman number, $\hat{Y}$ - unit vector along H , R - characteristic cavity dimension. The external field satisfies the conditions $\text{rot } h^0 = 0$, and $\text{div } h^0 = 0$. At the cavity boundary $u = 0$, $h = h^0$ and at infinity $h^0 = 0$. The solution of this boundary value problem is given in power series of M . Two cases are considered: 1) $h_{1\alpha}(M)$ even, $u_{1\alpha}(M)$ odd; 2) $h_{2\alpha}(M)$ odd, $u_{2\alpha}(M)$ even. The first is called "magnetic" solution because for $M = 0$, $h_{1\alpha}(0) = h_{\alpha}$, and the second solution is called "hydrodynamic" because for $M = 0$, $u_{2\alpha}(0) = u_{\alpha}$. The hydromagnetic perturbations are then studied for $M = 0$, and stream lines and field perturbation lines lie in the meridional plane. The perturbation velocity and field then introduce azimuthal currents with axis of symmetry as center. The results are obtained in spherical harmonics using Legendre polynomials. The results are subsequently extended to the case of weak field perturbations with $M \ll M_*$. Numerical results are obtained up to order M^2 , two for the "magnetic" case and two for the "hydrodynamic" case. Orig. art. has: 33 equations, 3 figures, and 1 table.

ASSOCIATION: none

SUBMITTED: 15Apr64

ENCL: 00

SUB CODE: ME

NO REF SOV: 004

OTHER: 000

Card 2/2

L 40318-65 EWT(1)/EWP(m)/EPA(sp)-2/EPF(n)-2/EWG(v)/EPR/EPA(w)-2/T-2/EWA(m)-2
Pd-1/Pab-10/Pe-5/Pe-4/Pi-4/Pu-4 LJP(c) WW

ACCESSION NR: AP4046276

S/0040/64/028/005/0959/0962

AUTHOR: Bratukhin, Yu. K. (Perm'); Shliomis, M. I. (Perm')

TITLE: One rigorous solution of the equations for nonstationary convection

SOURCE: Prikladnaya matematika i mekhanika, v. 28, no. 5, 1964, 959-962

TOXIC TAGS: nonstationary heat convection, rigorous solution, convection equation, magneto hydrodynamics

ABSTRACT: In a gravitational field, a fluid of nonuniformly distributed temperature can be in equilibrium only if the temperature gradient is vertical. By heating the fluid from below, the perturbations are either monotonically decreasing, or increasing, so that the equilibrium may be stable, or unstable. By heating from the top, all perturbations decay. A similar situation occurs in the case of the perturbation spectrum of a conducting fluid in a magnetic field (M. I. Shliomis, Oscillating perturbations in a conducting fluid in a magnetic field, PMM, 1963, v. 27, #3). Therefore, the results of that paper are valid in the present case. The rigorous solution is obtained for the case of a fluid in a spherical cavity. The
Cord 1/2

L 40318-65

ACCESSION NR: AP4048276

2
authors are grateful to G. Z. Gershuni and E. M. Zhukhovitskiy for a valuable discussion. Orig. art. has: 27 equations and 1 graph.

ASSOCIATION: None

SUBMITTED: 10Feb64

ENCL: 00

SUB CODE: MA, GP

NR REF SOV: 003

OTHER: 000

llc
Card 2/2

BRATUKHIN, Yu.K. (Perm'); SHLIOMIS, M.I. (Perm')

Distrubances of the equilibrium of a conducting liquid in a
spherical cavity in a magnetic field. PMTF no.4:23-28 J1-Ag '64.
(MIRA 17:10)

BRATUKHINA, L.V.

GERBST, V.V., doktor meditsinskikh nauk, professor; LOPATINA, A.A.;
ISMAGULOVA, Kh.Sh.; BRATUKHINA, L.V. (Ust' - Kamenogorsk)

Preventing the progress of silicosis. Klin.med. 33 no.4:29-32 Ap
'55. (MLRA 8:7)

1. Iz silikoznogo sanatoriya "Gornyak" (konsul'tant i nauchnyy
rukovoditel' -prof. V.V.Gerbst, glavnyy vrach A.A.Lopatina).
(SILICOSIS, therapy,
prev. of progr. of dis.)

The size of austenite grains and the stability of steel with
 sorbite and martensite structures. N. P. O. Pashkov and V.
 A. Bratukhin. Zhur. Tekh. Fiz. 23, 207-10 (1953). — The
 distribution of shear lines in deformed steel depends on the
 size of the austenite grains. The strength of the coarse-
 and fine-grained steels are, however, quite similar. The
 tendency toward brittleness increases sharply, while tough-
 ness decreases with increased grain size of austenite. Since
 the initial grain size sets the conditions of subsequent tem-
 pering, the properties of hardened steel are dependent to a
 significant degree on the grain size of the steel prior to heat-
 treatment. — C. H. Fushman

2

PRB MK

Determination of the tendency of ferritic structural steels towards cold-shortness by tensile testing data. P. O. Pashekov and V. A. Bratschkov. *Eng. Metal. & Metallurgy*, 3, 162-71 (1959). Tensile testing of different steels variously heat-treated in the 20 to -190° range showed that the ratio between the difference of reduction of area at 20° and at -190° and that at 20° might be used as an index of cold-shortness. L. D. Gut.

BRATUKHINA, V. A.

137-58-17

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1. p 232 (USSR)

AUTHORS: Pashkov, P. O., Bratukhina, V. A.

TITLE: The Structure and Embrittlement of Steel (Struktura i khrupkost' stali)

PERIODICAL: V sb.: Metallovedeniye. Leningrad, Sudpromgiz, 1957, pp 3-16

ABSTRACT: The process of brittle failure (BF) of various steels is examined on the assumption that the tendency to embrittlement is defined chiefly by inhomogeneity in the distribution of the plastic deformation (PD) within the deformed metal. All the observed cases of elevated tendency to brittle failure on the part of steels are related either to the presence therein of structural components having markedly different resistance to PD, or to large granular structure which also induces an increase in unevenness in the PD of the individual grains. Extreme inhomogeneity of PD renders the concept of a critical level of BF averaged across the section of the specimen vague. Evaluation of the tendency of steels to BF should be made on the basis of observations of the change in ductility and of the

Card 1/2

137-58-1-1712

The Structure and Embrittlement of Steel

type of fracture of specimens after significant deformations, with a gradual increase in the severity of the test conditions (reduction of temperature, increase in speed, increase in sharpness of the notch). The tendency of steels to BF is capable of complete definition by evaluation of the degree of nonuniformity in the distribution of the PD in different microvolumes. However, the problem of doing this has not yet been solved systematically. All the considerations advanced pertain only to those manifestations of embrittlement of steel as cold-shortness, notch sensitivity, and sensitivity to speed of deformation, but do not apply to hot-shortness, temper brittleness, etc.

Bibliography: 23 references.

Ya. P.

1. Steel--Brittleness--Analysis

Card 2/2

V.A. Bratukhina

204(7) **PHASE I BOOK REVISIONS** 007/10/96
 Metallurgy; *shurnik stroy*, [vyp.] 2 (Study of Metals); Collection of Articles,
 [in] 2) [Leningrad] Subprint, 1958. 265 p. 4,000 copies printed.

Rev. M.: G.I. Myrta, Candidate of Technical Sciences; M.: Ye. A. Drogova;
 Sub. M.: E.M. Volchok.

PURPOSE: This book is intended for metallurgists and metallurgical engineers.
CONTENTS: This is the second volume of collected scientific papers dealing with
 various problems in physical metallurgy, particularly in mechanical metallurgy
 and metallography. Topics covered include hydrogen embrittlement, inter-
 metallic diffusion of elements in alloys, effect of tempering on carbon
 redistribution in steels, investigation of certain phenomena in steels,
 effect of certain alloying elements on the mechanical properties of steels,
 steel, strength of welded specimens of high-strength steels, effect of strain hardening
 on the properties of an aluminum alloy, etc. The articles are concerned mainly
 with various types of steel, though some deal with nonferrous alloys.

Over 1/25

Study of Metals (Cont.)

007/10/96

Pushay, P.O., Doctor of Technical Sciences, Professor, and V.A. Bratukhina,
 Candidate of Technical Sciences, Associate Professor, Institute of Metals,
 Leningrad. On the Principles Operating in the Effect of Grain Size on
 Brittleness in Ferritic Steel.

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A study was made of the development of certain defects occurring during
 the process of plastic deformation, which defects may lead to failure.
 The data obtained were compared from the point of view of the relation-
 ship between grain size and toughness. In addition, a study was made of the
 relationship between grain size and the development of defects in steel.
 With a structure, highly tempered after hardening, the grain size of steel
 with a structure of mixed ferrite and pearlite grains (mainly lamellar).
 The tendency to brittleness of the first group of steel is determined by
 the length of the ferrite grains, which are more or less plate-shaped.
 The length of the ferrite grains, which are more or less plate-shaped, is
 with a high length-to-thickness ratio. In the second group, the ten-
 dency to brittleness is determined by the distance between neighboring
 bands of dislocations (slip), which is a measure of the degree of
 irregularity in the three-dimensional distribution of strains in the
 steel being deformed.

Over 1/25

PASHKOV, P.O., prof., doktor tekhn.nauk; BRATUKHINA, V.A., inzh.

Reasons for the effect of grain size on ferritic steel brittleness.
Metallovedeniye 2:158-174 158. (MIRA 13:9)
(Metal crystals) (Steel--Brittleness)

BRATUKHINA, V. A.

PLATE I BOOK EXPLANATION 80V/572

Metallurgical, Zhurnal, No. 3 (Physical Metallurgy) Collection of Articles, No. 3), Leningrad, Subprints, 1959. 30 p. 3,200 copies printed.

Ed.: O. I. Kopylov, Candidate of Technical Sciences; Literary and Tech. Ed.: E. L. Doroshenko.

PURPOSE: This collection of articles is intended for scientific personnel at research and educational institutions and industrial plants and also for advanced students.

CONTENTS: The articles report the results of investigations of 1) the effect of various factors on the susceptibility of constructional and heat-resistant steels and titanium alloys to brittle failure at various temperatures under various conditions of loading (long-time, short-time, cyclic, impact); 2) alloying, structure, and condition of alloys as related to their mechanical properties, and 3) corrosion resistance and evaluation of stainless and heat-resistant steels. The articles are accompanied by numerous Soviet and non-Soviet references. No abnormalities are mentioned.

Author, P. O., and J. A. Bratukhina, Engineer. Mechanical Strength of Steel

Blazovkin, Yu. P., Candidate of Technical Sciences. Thermal Fatigue of Metals 214

Chernilov, E. B.; V. I. Syabchikov, Engineer; and Ye. S. Rybnikov, Candidate of Technical Sciences. Investigation of the Fatigue Strength of Titanium 230

Yashchikov, A. I., Candidate of Technical Sciences. Effect of Vanadium, Molybdenum, and Niobium on the Properties of Alpha Alloys of Titanium 263

Davids, Yu. D. Heat Treatment of Two-Phase Alloys of Titanium 279

Moroz, L. S., and Khazin, Yu. D. Anomalous Grain Growth of Metals in Vacuum 298

Rukh, E. I., Candidate of Technical Sciences; A. S. Zaymalov, and O. I. Kopylov, Candidate of Technical Sciences. Investigation of the Redistribution of Elements in Metallic Alloys and Rukh, E. I. Solubility of Carbon in Alpha-Iron 306

Gel'derman, L. S., Candidate of Technical Sciences; and E. I. Kalyagina, Engineer. Structure and Properties of Forgings as Influenced by Forging Conditions 349

Shul'kin, E. M., Candidate of Technical Sciences; A. I. Yashchikov. Properties of Single-Phase Wrought Titanium Alloys 358

Strohan, E. V., Candidate of Technical Sciences. Modeling in Corrosion Tests Made in Moving Sea Water 367

Rechitskaya, S. Ye., Engineer; and E. I. Leonov, Engineer. Use of the Electron Microscope in Investigating the Structure of Type-St-46 Austenitic Steel at Various Degrees of Susceptibility to Intergranular Corrosion 381

AVAILABLE: Library of Congress

Card 6/6

72/ VK/RN/ra 7-50-60

AUTHORS: Pashkov, P. O. and ~~Bratukhina, V. A.~~ SOV/126-6-1-17/33

TITLE: On the Distribution of Plastic Deformation in Polycrystalline Metals (O raspredelenii plasticheskoy deformatsii v polikristallicheskikh metallakh)

PERIODICAL: Fizika Metallov i Metallovedeniye, 1958, Vol 6, Nr 1, pp 128-134 (USSR)

ABSTRACT: In an earlier paper (Ref.1) one of the authors pointed out that plastic deformation in commercial coarse grain iron is non-uniformly distributed with a clearly pronounced quasi-periodicity as regards the degree of deformation. In this paper the author publishes the results of further study of the quasi-periodicity in the distribution of residual deformation. The main experiments consisted of tensile tests in the range of plastically uniform deformation (until neck formation) of specimens of various engineering carbon and alloy steels (Table 1, p 128). The limit relative elongations were up to 0.14%. Some of the investigations were carried out at +20°C. However, a number of investigations were also carried out at -196°C. The results are tabulated and graphed and the following conclusions are

Card 1/3

SOV/126-6-1-17/33

On the Distribution of Plastic Deformation in Polycrystalline Metals

arrived at: The phenomenon of periodicity in the distribution of plastic deformation in a deformed polycrystal is a natural consequence of the general non-uniformity of the deformation of grains of a polycrystalline metal. It was found that the deformation in a body is composed of alternations of regions with strong deformations and regions with slight deformations, the dimensions of which are larger by 1 to 2 orders of magnitude than the dimensions of the grains from which the polycrystal is built up. It was found that such a type of non-uniformity in the deformed state may lead to internal stresses which equalise over areas larger than type II stresses do. The authors express the assumption that these phenomena are likely to influence appreciably the processes of corrosion and failure under the effect of an external medium. Numerous components in engineering which are subjected to an intensive effect of an active external medium are produced by deformation in the cold state. Undoubtedly, the phenomenon of periodicity in the distribution of the deformation and the resulting internal stresses should

Card 2/3

SOV/126-6-1-17/33
On the Distribution of Plastic Deformation in Polycrystalline Metals
appreciably intensify the inclination of the metal to
localised corrosion or localised failure. Further
study of this problem is considered desirable.
There are 3 figures, 4 tables and 6 references, 4 of
which are Soviet, 2 English.

SUBMITTED: July 10, 1956

Card 3/3

1. Alloys--Deformation
2. Alloys--Crystal structure
3. Alloys--Stresses

85382

S/032/60/026/010/014/035
B016/B054

18-8200

AUTHORS: Balandin, Yu. F., Bratukhina, V. A., and Zolotukhina, M. A.

TITLE: Methods of Testing Materials Used Under the Continuous Action
of Cyclic Thermal Stresses

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 10, pp. 1130-1132

TEXT: The authors discuss two methods of testing the continuous action of cyclic thermal stresses: a) The samples are chucked in special clamps (Fig. 1). The sample and the clamp must be of the same material, or of materials with a similar coefficient of expansion. A difference in this coefficient would effect an additional deformation (or relief) of the sample. The dimensions of sample and clamp given in Fig. 1 are practically the possible minimum. The samples stretched to a certain extent are put into a furnace which is heated to the required temperature. After a certain period of time, the samples are taken out of the furnace, cooled, relieved, then again stretched to the same extent as in the first cycle, and so on. The tests are continued until the destruction of the sample,

Card 1/3

85382

Methods of Testing Materials Used Under the S/032/60/026/010/014/035
Continuous Action of Cyclic Thermal Stresses BO16/BO54

or until attaining the given number of cycles. The internal stress of the sample can be determined by measuring the elastic deformation. Thus, the following parameters are given in this method: the deformation characterizing the temperature gradient under the conditions of practical use of the material; the temperature corresponding to the actual state of the material in the respective construction; and the duration of the action of temperature which is chosen to be equal to the average period of time between the abrupt fluctuations of the temperature field along the cross section of the workpiece. b) The second method, which also simulates a continuous action of cyclic thermal stresses, is based on a periodic loading of rings made of the material to be tested in the form of wedges driven in. Fig. 2 shows the geometrical dimensions of a test ring chosen on the basis of a preceding calculation. By analyzing half the ring loaded by a force perpendicular to the opening (Ref., Footnote 3) it is possible to establish a relationship between the variation of the opening width and the stresses resulting in the outer fibers of the central ring part (cross section AA, Fig. 2) within the elastic range. Either of the test methods simulating a continuous action of cyclic thermal stresses, has its specific advantages. Therefore, it is convenient to choose the method

Card 2/3

85382

Methods of Testing Materials Used Under the S/032/60/026/010/014/035
Continuous Action of Cyclic Thermal Stresses B016/B054

according to the purpose of investigation. There are 3 figures and
1 Soviet reference.

Card 3/3

S/126/62/013/001/011/018
E021/E580

13-1130

AUTHORS: Balandin, Yu.F. and Bratukhina, V.A.

TITLE: Study of the initial stage of thermal fatigue by the method of microhardness measurements

PERIODICAL: Fizika metallov i metallovedeniye, v.13, no.1, 1962, 122-125

TEXT: A chromium-nickel steel 1X13H16B (1Kh13Ni6B) containing niobium was used. The steel was austenitized at 1150°C, cooled in water, and aged for 10 hours at 600°C. Cylindrical samples (15 mm diameter, 25 mm length) were cut from the steel and longitudinal grooves (0.5 mm depth, 1 mm radius) cut in the samples. The surface cold work from the mechanical treatment was removed by heating for 12 min at 1150°C in sealed tubes. Testing was carried out by periodic heating of unloaded samples to 600°C and cooling in running water. 5 to 250 cycles were used. The samples were then halved in their length. One half was heated for 10 min at 1150°C and microsections were then cut from both halves. To ensure that no cold-work remained, a 100 μ layer was removed from the surface by electrolytic polishing. Microhardness Card 1/2 X

Study of the initial stage ...

S/126/62/013/001/011/018
EO21/E580

measurements were taken using a 10 g load on all parts of the sample from the centre to the bottom of the notch. 50-300 indentations were made on each sample. Measurements in the centre and at the base of the notch before thermal fatigue testing gave good agreement. In the quenched samples, microhardness at the base of the notch decreased somewhat with an increasing number of thermal cycles but did not drop below that of the sample aged at 600°C for 10 hours. After the short treatment at 1150°C, there was a considerable decrease in hardness at the base of the notch; the greater the number of thermal cycles, the lower was the microhardness. This continued to 150 cycles when short cracks, due to thermal fatigue, appeared. Further cycling after cracks had appeared had no effect on microhardness. In the centre of the sample, there was no change in microhardness during the thermal fatigue test. There are 4 figures.

SUBMITTED: March 20, 1961

Card 2/2

Bratukhina V.A.

PASHKOV, P.O., doktor tekhn.nauk, prof.; BRATUKHINA, V.A., inzh.

Mechanical strength of foil. Metallovednie 3:214-229 '59.
(MIRA 14:3)
(Metal foils--Testing)

NICULESCU, G.G. (Roman); COSTACHESCU, C.V.; SACTER, O.; BATINETU, D.M.
(Bucuresti); GHISALITA, Adrian (Cluj); PIRSAN, Liviu (Bucuresti);
GRIGORESCU, Serban I. (Bucuresti); BRATULESCU, I., prof.
(Constanta); UDRISTE, Constantin, prof. (Bucuresti); CALUGARITA,
Gh. (Bucuresti); VOICULESCU, Dan (Bucuresti); TEODORESCU, I.
(Galati); IONESCU-TIU, C.; POPA, Eugen I. (Iasi); POPA, H.
Alexandru (Pucioasa); STAVRE, Petre (Craiova); MUSTA, St. (Oradea)

Proposed problems. Gaz mat B 15 no.7:311-316 J1 '64.

KHIZHNYAK, F.D.; BRATUS', A.D.

Contact less transmitters with magnetic amplifiers used instead of
automatic flag breakers. Proizv.opyt v tiash.mash.no.4:71-80 '56.
(Electric controllers) (Magnetic amplifiers) (MLRA 10:2)

BRATUS', A.D.

Electromagnetic flaw detection on continuous pipe and rolling mill
trains. Avtom. svar. 16 no.6:49-54 Je '63. (MIRA 16:7)

1. Elektrostal'skiy zavod tyazhelogo mashinostroyeniya.
(Rolling mills) (Magnetic testing)

ACC NR: AP6029942

(A,N)

SOURCE CODE: UR/0413/66/000/015/0105/0105

INVENTORS: Bratus', A. D.; Sokolov, B. I.; Safronov, S. F.

ORG: none

TITLE: Installation for the detection of defects in metallic objects. Class 42, No. 184503

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 105

TOPIC TAGS: metal surface imperfection, metal test, metallurgic testing machine

ABSTRACT: This Author Certificate presents an apparatus for detecting defects in metallic objects, based on the utilization of eddy currents. The apparatus consists of two spools. One of these contains the object to be tested and the other a standard specimen. The spools are equipped with magnetizing constant current windings and with measuring alternate current windings. The latter are connected to an amplifier and to a signal detector. To increase the sensitivity of the apparatus in the detection of certain defects, the amplifier is equipped with non-linear diode transducers which transform two interdependent voltages. One of

Card 1/2

UDC: 620.179.143-462

ACC NR: AP6029942

these is proportional to the amplitude of the output signal, and the other varies with the phase of signal relative to the phase of the supply voltage, thus limiting the transmission region of the output signal of the defectoscope.

SUB CODE: 113/ SUBM DATE: 16Nov61

Card 2/2

BRATUS', B.A.; ZINCHENKO, A.M.; MITULINSKIY, Yu.T.

Device for reading hand- and typewritten numbers. Avtom. 1 prib. no.1:
32-34 Ja-Mr '63. (MIRA 16:3)

1. Institut kibernetiki AN UkrSSR.
(Reading machines)

BRATUS, I.N.

Preparation of synthetic coumarin. Zhur. VKHO 5 no.4:410-412 '60.
(MIRA 13:12)
(Coumarin)

BRATUS, I.N.; VORONIN, V.G.

Synthesis of coumarin. Trudy VNIISNDV no.5:34-37 '61. (MIRA 14:10)
(Coumarin)

BRATUS, I.N.; VORONIN, V.G.; BOGDANOV, K.A.

Purification of industrial salicylaldehyde, obtained by the
Timan-Reimer method. Trudy VNIISNDV no.5:111-112 '61. (MIRA 14:10)
(Salicylaldehyde)

BRATUS, I.N.; FILATOVA, I.A.; VORONIN, V.G.; EELOV, V.N.

Improvement of the synthesis of salicylaldehyde. Trudy VNIISNDV
no.6:45-48 '63. (MIRA 17:4)

VOROB'YEVA, G.V.; KIREYEV, Yu.A.; BRATUS, I.N.; VORONIN, V.G.

Production of β -phenylethyl alcohol from styrene. Trudy VNIISMDV
no.6:48-50 '63. (MIRA 17:4)

BRATUS, I.N.; VORONIN, V.G.; ERLOV, V.N.

Some variants of coumarin synthesis. Trudy VNIISNDV no.6:81-85
'63. (MIRA 17:4)

ACCESSION NR: AT4019742

S/0000/63/000/000/0107/0112

AUTHOR: Mituly*ns'ky*y, Yu. T. (Mitulinskiy, Yu. T.); Bratus', B. A.

TITLE: An analog method for recognizing stylized arabic numerals

SOURCE: AN UkrRSR. Instytut kibernetiky*. Obchy*slyuval'na matematy*ka i tekhnika (Computer mathematics and engineering). Kiev, Vy*d-vo AN UkrRSR, 1963, 107-112

TOPIC TAGS: number recognition system, analog method, noise method

ABSTRACT: The author considers the possibility of constructing an analog number-recognition system for a specially worked-out print. Analog number-recognition systems are of interest from the standpoint of their simplicity and the possibility of achieving a high computer speed. However, since the noise stability of the system that the author presents is low, it is concluded that similar number-recognition systems could not be realized on a computer. Orig. art. has: 3 figures.

ASSOCIATION: none

Card 1/21

BRATUS, N.V.

EXCERPTA MEDICA Sec.2 Vol.9/9 Physiology, etc. Sept 56

4162. BRATUS N. V. Chair of norm. Physiol., med. Inst., Vinnitsa. *Effect of stimulation of the gastric interoceptors on the electrical activity of the cerebral cortex in the rabbit (Russian text) FIZIOL. Z. 1956, 42/2 (232-237) Illus. 4

Mechanical stimulation of the stomach in rabbits abolishes the basic rhythm (4-7 c.p.s.) of the EEG in the occiput region of the cerebral cortex. The inhibition continues for 6 sec. after the end of stimulation, and is followed by a short period of exaltation (3 sec.); the recovery of the original basic rhythm takes about 10-12 sec. In the frontal region of the cerebral cortex, mechanical gastric stimulation produces bursts of large oscillations, together with inhibition of the original basic rhythm. After the end of stimulation, the electrical activity is increased, and periodical bursts of large oscillations appear frequently. The recovery of the original pattern takes several minutes.

Simonson - Minneapolis, Minn.

Kafedra normal'noy fiziologii Meditsinskogo instituta, Vinnitsa.

Country : USSR
Category: Human and Animal Physiology. Nervous System.
Cerebral Cortex

T

Abs Jour: RZhBiol., No 19, 1958, 89214

Author : Bratus, N.V.

Inst :

Title : Investigations of the Electrical Activity of the
Cerebral Cortex Following Interceptive Stimulation
in a Chronic Experiment.

Orig Pub: Fiziol. zh., 1957, 3, No 3, 3-11

Abstract: In dogs and rabbits with a gastric Basov fistula
single-type of change was observed in the EEG under
the effect of distention of the stomach with pres-
sures of 30-35 mm of mercury; a discharge of impulses
with following suppression of the electroactivity in

Card : 1/2

T-94

Country : USSR

T

Category: Human and Animal Physiology. Nervous System.
Cerebral Cortex

Abs Jour: RZhBiol., No 19, 1958, 89214

the frontal lobes (a reaction of the projection zones of the cortex) and suppression of the slow rhythms in the occipital lobes. Weaker stimulation (pressure of 10-15 mm) caused changes in dogs only in the frontal areas and in rabbits in the whole cortex. No changes were observed in the EEG when the animals consumed small portions of food; filling of the stomach with food inhibited the electrical activity of the brain and produced periodical discharge of impulses of great amplitude in the frontal lobes. -- K.S. Ratner

Card : 2/2

USSR/Human and Animal Physiology - Nervous System.
Cortex of Cerebral Hemispheres.

T-10

Abs Jour : Ref Zhur - Biol., No 7, 1958, 32161

Author : Bratus', N.V.

Inst :

Title : Some Electrophysical Data on the Means of the Spread of
Interceptive Impulses in the Cerebral Cortex.

Orig Pub : Sb. nauchn. tr. Vinnitsk. gos. med. in-ta, 1957, 8, 131-
139.

Abstract : During stimulation in rabbits of the splanchnic, vagus and
phrenic nerves, there were observed a depression of the
basic rhythm and the appearance of small frequent poten-
tials in the occipital and parietal regions and the
strengthening of the potentials in the frontal region of
cortex. Analogous results were obtained during stimula-
tion of the interoceptors of the internal organs (stomach,
duodenum). The author thinks that the core of the

Card 1/2

- 111 -

USSR/Human and Animal Physiology - Nervous System.
Cortex of Cerebral Hemispheres.

T-10

Abs Jour : Ref Zhur - Biol., No 7, 1958, 32161

interoceptor analyzer of the cortex is localized in the
anterior sections of the cerebral hemispheres.

Card 2/2

Country	: USSR	T
Category=	: Human and Animal Physiology, The Nervous System	
Abs. Jour.	: Ref Zhur Biol, No. 2, 1959, No. 8475	
Author	: Bratus', N.V.	
Institut.	: --	
Title	: The Effect of Interoceptive Stimuli on the Electrical Activity of the Cerebral Cortex in Hypothermy.	
Orig. Pub.	: Patol. fiziologiya i eksperim, terapiya, 1958, 2, No. 2, 23--27	
Abstract	: Stretching the stomachs of lightly ether-anesthetized rabbits by means of a rubber balloon resulted in an increase in the electrical activity of the cortex in the frontoparietal region. In the presence of hypothermy in combination with ether anesthesia (produced by chilling the animals with ice), the electrographic response to the same stimulus at 33--30° did not diminish, but in a portion of the experiments even increased. At 30--28°, simultaneously with a reduction in background electrical activity, mechanical stimulation of the gastric recep-	
Card:	1/3	

Country : USSR
 Category : Human and Animal Physiology, The Nervous System T
 Abs. Jour. : Ref Zhur Biol, No. 2, 1959, No. 8475
 Author : Bratus', N.V.
 Institut. :
 Title :
 Orig Pub. :
 Abstract : tors still produced a considerable rise in electrical activity in 25% of the experiments. Only at 26--24° did such stimulation fail to reflect on the electrical activity. Background activity disappeared at 22--20°, and death occurred at temperatures below 20°. Complete recovery of electrical activity upon warming the animals was only possible when the rectal temperature had not fallen below 24°. Even in hypothermy at 30--28° the increase in cortical excitability associated with stimulation of the interoceptors is not eliminated, and
 Card: 2/3

Country : USSR
Category= : Human and Animal Physiology, The Nervous System^T

Abs. Jour. : Ref Zhur Biol, No. 2, 1959, No. 8475

Author :
Institut. :
Title :

Orig. Pub. :

Abstract : consequently conditions are maintained in which
shock could arise in severe operations.--A.M.
Gurvich

Card: 3/3

BRATUS', N.V.

Afferent pathways of the stomach. Fiziol. zhur. [Ukr.] 4 no.6:753-759
N-D '58. (MIRA 12:3)

1. Vinnitskiy meditsinskiy institut, kafedra normal'noy fiziologii.
(STOMACH--INNERVATION) (CEREBRAL CORTEX)

ANDRENKO, P.T., BRATUS', N.V., kand.med.nauk

Effect of stimulation of the gastric mechanoreceptors on biopotentials of the brain in peptic ulcer. Vrach. delo no.7:683-687
Jl '58 (MIRA 11:9)

1. Kafedra fakul'tetskoy terapii (zav. - prof. B.S. Shklyar) i
Kafedra normal'noy fiziologii (zav. - prof. N.K. Vitte) Vinnitskogo
meditsinskogo instituta.
(PEPTIC ULCER)
(ELECTROENCEPHALOGRAPHY)

BRATUS', N.V.

Some data on cortical representation of the internal organs [with summary in English]. Biul.eksp.biol. i med. 45 no.6:3-6 Je '58

(MIRA 11:8)

1. Iz kafedry normal'noy fiziologii (zav. - prof. N.K. Vitte) Vinnitskogo gosudarstvennogo meditsinskogo instituta. Predstavlena deystvitel'nym chlenom AMN SSSR V.V. Parinyam.

(ADRENAL CORTEX, physiology,

eff. of stimulation on stomach & response to gastric stimulation (Rus))

(STOMACH, physiology,

eff. of cerebral cortex stimulation & response to cortical stimulation (Rus))

BRATUS', N.V. (Vinnitsa)

Problem of the effect of interoceptive stimulation on the electrical activity of the cerebral cortex following the administration of amine. Pat.fiziol.i eksp.terap. 3 no.5:56-62 S-O '59.

(MIRA 13:3)

1. Iz kafedry normal'noy fiziologii (zaveduyushchiy - prof. N.K. Vitte) Vinnitskogo gosudarstvennogo meditsinskogo inatituta.

(CHLORPROMAZINE pharmacol.)

(STOMACH physiol.)

(ELECTROENCEPHALOGRAPHY)

ANDRENKO, P.T.; BRATUS', N.V.

Effect of the stimulation of gastric mechanoreceptors on brain potentials in man. Fiziol.zhur. 45 no.2:151-156 F '59.

(MIRA 12:3)

1. From the departments of internal medicine and of physiology, Medical Institute, Vinnitsa.

(ELECTROENCEPHALOGRAPHY,

eff. of stomach stimulation (Rus))

(STOMACH, physiol.

eff. of stimulation on EEG (Rus))

BRATUS', N. V. (Vinnitsa)

Ob uchastii retikulyarnou formatsii v elektricheskikh reaktsiyakh kory
bol'shikh polushariy i mozzhechke na interoneptivnyye razdrazheniya

report submitted for the First Moscow Conference on Reticular Formation,
Moscow, 22-26 March 1960.

BRATUS', N.V.

Projection areas of gastric nerves in the cerebral cortex and the cerebellum. Fiziol. zhur. [Ukr.] 6 no.6:721-729 N-D '60.

(MIRA 14:1)

1. Department of Normal Physiology of the Vinnitsa Medical Institute
and Department of Normal Physiology of the Odessa Medical Institute.
(STOMACH—INNERVATION) (CEREBRAL CORTEX)
(CEREBELLUM)

BRATUKHIN, Igor' Mikhaylovich, mashinist-instruktor depo Novosibirsk
Tomskey zh.d.; FAMINSKIY, G.V., kandidat tekhnicheskikh nauk,
redaktor; KANDYKIN, A.Ye., tekhnicheskiy redaktor.

[Increasing the mileage of electric locomotives between repairs]
Uvelichenie mezhremontnykh probegov elektrovozov. Moskva, Gos.
transp.zhel-dor.izd-vo, 1955. 31 p. (MLRA 8:11)
(Locomotives)

BRATUS', N.V.

Representation in the cerebellum of certain visceral nerves. Fiziol.
zhur. 46 no.2:179-184 F '60. (MIRA 14:5)

1. From the Department of Physiology, Medical Institute, Vinnitza.
(CEREBELLUM) (ABDOMEN—INNERVATION)

BRATUS', N.V., dotsent

Participation of the reticular formation in the conduction of
interoceptive impulses to the cerebral and cerebellar cortex .
Vrach. delo no.6:72-75 Je'63. (MIRA 16:9)

1. Kafedra normal'noy fiziologii (zav. - prof. N.K.Vitte)
Vinnitskogo meditsinskogo instituta i kafedra normal'noy
fiziologii (zav. - prof. F.N. Serkov) Odesskogo meditsinskogo
instituta.

(BRAIN)

(VISCERA---INNERVATION)

BRATUS', N.V.

Effect of adequate stimulation of the digestive tract on the electrical activity of the cerebellar cortex and some other parts of the brain in cats. Dokl. AN SSSR 154 no.4: 986-989 P '64. (MIRA 17:3)

1. Vinnitskiy meditsinskiy institut im. N.I. Pirogova i Odesskiy meditsinskiy institut im. N.I. Pirogova. Predstavleno akademikom V.N. Chernigovskim.

BRATUS', N.V.

Interaction between the cerebral cortex and the cerebellar
cortex in the interoceptive processes. Dokl. AN SSSR 154
no.5:1225-1228 F'64. (MIRA 17:2)

1. Vinnitskiy meditsinskiy institut im. N.I. Pirogova i Odesskiy
gosudarstvennyy institut im. N.I. Pirogova. Predstavleno
akademikom V.N. Chernigovskim.

ACCESSION NR: AR4027232

S/0299/64/000/002/P011/P011

SOURCE: RZh. Biologiya, Abs. 2P62

AUTHOR: Bratus', N. V.

TITLE: The role of the reticular formation in the electrical reactions of the cerebral cortex and cerebellum in response to interoceptive stimuli

CITED SOURCE: Sb. Golovn. mozg i regulyatsiya funktsiy. Kiyev, AN USSR, 1963, 52-54

TOPIC TAGS: cerebral cortex, central nervous system, reticular formation, cerebellum, electroencephalography, interoceptive stimulus, visceral nerve, chlorpromazine

TRANSLATION: Adequate stimulation of the interoceptors of the intestine and stomach and electrical stimulation of the visceral nerves in rabbits and cats, under light anesthesia, was accompanied by suppression of the alpha rhythm, strengthening of beta activity in the EEG of the occipital, parietal, and temporal zones of the cortex, and strengthening of activity (appearance of potentials at 16-22 cps with a comparatively high amplitude) in the EEG of the frontal zone of the cortex. On deepening of the anesthesia, changes in the EEG appeared only in the frontal area (appearance in the cruciform gyrus of a biphasic action current, sometimes monophasic with only the first surface-positive phase). Chlorpromazine, given

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ACCESSION NR: AR4027232

to the animals in a dose of 2-4 mg/kg, eliminated the generalized changes in the EEG, but did not fully eliminate the effect of interoceptive impulses on the cerebral cortex even at doses of 6-10 mg/kg. The response of the cerebellar cortex to stimulation of the interoceptors and visceral nerves under conditions of light and deep anesthesia and the effect of chlorpromazine were analogous in character. It is suggested that the apparatus of the cortex and cerebellum, which receive the impulses from the interoceptors, includes specific projection fibers and a nonspecific afferent system, the substrate of which is the reticular formation. R. P.

DATE ACQ: 14Feb64

SUB CODE: LS

ENCL: 00

Card 2/2

BRATUS', N.V.

Electrophysiological research on the interaction of visceral impulses in the cerebellar cortex. Fiziol. zhur. [Ukr.] 10 no.1:16-24 '64. (MIRA 17:8)

1. Kafedra normal'noy fiziologii Vinnitskogo meditsinskogo instituta i kafedra normal'noy fiziologii Odesskogo meditsinskogo instituta.

BRATUS', O.S.

Granulometric composition of arenaceous sediments in the Crimea.

Dokl. AN SSSR 163 no.2:431-434 J1 '65.

(MIRA 18:7)

1. Institut mineral'nykh resursov, Simferopol'. Submitted April 6, 1965.

BRATUS', O.S.

Composition of the beaches of the Crimean Peninsula. Dokl.
AN SSSR 165 no.2:399-402 N '65. (MIRA 18:11)

1. Institut mineral'nykh resursov, Simferopol'. Submitted
May 26, 1965.

SHUPIK, P.; LAVRIK, S.; SHUMADA, I.; LESHCHENKO, P.; MEDYANIK, R.; RADCHENKO, P.;
PANCHENKO, V.; YESINENKO, L.; CHEBOTAREV, D.; ~~BRATIS, V.~~; ISHCHENKO, I.;
KOMISSARENKO, I.; KOLOMIYCHENKO, I.; MAKARCHENKO, A.; ARUTYUNOV, A.;
SKRIPNICHENKO, D.; RODZAYEVSKIY, A.; PAVLENKO, K.; LEONENKO, K.;
KOZYRENKO, N.; PARKHOMENKO, V.; CHEREN'KO, M.

Aleksandr Kirillovich Gorchakov; obituary. Vrach. delo no.8:144-145
Ag '60. (MIRA 13:9)

(GORCHAKOV, ALEKSANDR KIRILLOVICH, 1900-1960)

BRATUS, I.D.

[Acute gastroduodenal hemorrhages] Ostrye gastroduodenal'nye krovo-
techenia. Kiev [Gosmedizdat], 1954. 117 p. (MIRA 8:3)
(Hemorrhage)

100-1070-10
PETROV, V.D.; BRATUSYA, V.D.; DUPLINKO, K.F.

[Outline history of medicine and public health in the Ukraine]
Ocherki istorii meditsinskoi nauki i zdavookhraneniia na Ukraine. Pod red. V.D.Petrova, V.D.Bratusia i K.F.Duplenko. Kiev, Gosmedizdat. USSR, 1954. 437 p. (MIRA 8:11)
(UKRAINE--MEDICINE) (UKRAINE--PUBLIC HEALTH)

BRATUS', V.D.

42. General Practitioners' Reference Book on First Aid and Treatment of Burn Casualties

Termicheskiye Ozhogi (Thermal Burns), by Docent Vasiliy Dmitriyevich Bratus', Kiev, Gosudarstvennoye Meditsinskoye Izdatel'stvo UkSSR, 1956, 131 pp

This book is intended as a reference for the general practitioner. It gives basic data on burns in condensed form, and contemporary data on the general and local changes occurring in a burn victim. It discusses the most rational method of therapy, depending on external conditions and circumstances, the degree and nature of the burn, and the individual characteristics of the patient.

The book is based on the experiences of the Surgical Clinic of the Kiev Institute for Advanced Training of Physicians (head, Prof I. I. Kal'chenko). Wide use was also made of material found in Soviet literature.

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